



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,649	04/17/2006	Gunter W. Lutze	P7627US	2266

30008 7590 07/08/2010
GUDRUN E. HUCKETT DRAUDT
SCHUBERTSTR. 15A
WUPPERTAL, 42289
GERMANY

EXAMINER

BRADFORD, CANDACE L

ART UNIT	PAPER NUMBER
----------	--------------

3634

MAIL DATE	DELIVERY MODE
-----------	---------------

07/08/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/509,649	Applicant(s) LUTZE, GUNTER W.	
	Examiner CANDACE L. BRADFORD	Art Unit 3634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 102-126 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 102-126 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/29/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of restriction in the reply filed on 4/13/10 is acknowledged. The traversal is on the ground(s) that claim 120 and 127 now contain a common feature. Method steps in apparatus claims are not germane to patentability as long as the structure is capable of being so made, so the limitations cannot serve to provide a shared inventive technical feature, as it is not inventive in an apparatus claim to claim the method of making. This is not found persuasive because claim 127-130 are specifically drawn to a method of manufacturing a light scaffold plate which is class 424.

Further, applicant cannot amend the claims to overcome art that rendered non-inventive the original shared technical feature of the original claims. Such practice would mean that applicant could amend over and over during the lack of unity stage, requiring examiner to research multiple different claims, over and over again. The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

Claims 105,107, 122, 128, and 129 are objected to because of the following informalities: The use of "and/or" is improper. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claim 102 recites the limitation "the known scaffold floor systems" in line 7. There is insufficient antecedent basis for this limitation in the claim.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 102 recites the broad recitation metal, and the claim also recites "preferably aluminum" which is the narrower statement of the range/limitation.

With respect to claim 102, what is the limitation described as "known scaffold floor systems"—known by whom?

Art Unit: 3634

What is referred to by "its cover layers connected thereto"? specifically—what does "its" refer to and what does "thereto" refer to?

With respect to claim 103—what is meant even being claimed? is there supposed to be an alternative somewhere? First, where is antecedent support for "the material composite"? What material composite is according to claim 102? Is that material composite necessarily a fiber-reinforced plastic composite? Then, in the main body of the claim, "it" (is this the light scaffolding plate, the material composite, or the fiber-reinforced plastic composite??) has QUOTE:

border or edge terminuses, molded-on lateral parts, intermediate webs, frame reinforcements, shelving and suspension fittings on the entire or interlocking parts of the width or length, also in known claw, hook, or rounded groove form to be hung in an angled profile, U-profile, or tubular profile, which are molded directly on or from, and also only or additionally has holes to be hung in the scaffold structure, which is provided with corresponding upright pins, the holes being reinforced by hollow rivets made of metal or plastic or by material compression at the hole edges.

After 10 minutes of careful analysis, examiner has no idea what is being claimed in claim 103. Must "it" have all those items? "Also in known" – what does this refer to? What is "molded directly on or from"? What "also only or additionally has holes" is the scaffolding provided with corresponding upright pins?

Claim 105 recites the limitation "the lateral protection parts" in line 2. There is insufficient antecedent basis for this limitation in the claim.

With respect to claim 106-- what "the support core" where is antecedent basis for this?

Claim 126 provides for the use of a floor plate, timbering plate, wall plate, wall panel, sound protection plate, thermal or sound insulation plate, roof panel, support layer, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

With respect to claim 126, how is "analogous to a scaffolding plate" defined? What makes something that is not a scaffolding plate analogous to one?

With respect to claim 124: A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 124 recites Numerous broad limitations (up to 5 kg/m³ at thickness up to 20 mm), etc,

Art Unit: 3634

and then includes the narrower limitation. (up to 4 OR 3.5 OR 3 kg/m³ at thickness up to 20 mm).

These are NON-LIMITING examples only. EVERY CLAIM must be carefully reviewed and edited so that each claim is clear, definite, and understandable. As a guideline, if something is "with or without reinforcement" then "with or without reinforcement" adds nothing but words to the claim. A full load is not a known or defined term—full defined how? "in the middle or another location" —does nothing to limit 'between the suspensions (what suspensions—antecedent basis). What limitation is defined by: "stackable with or without a molded lateral protection part of 10, 15, or even, as a falling guard, of over 100 cm height. " – isn't that limitation requiring only 'stackable" since with or without is 100% of possibilities, and the non-required molded lateral projection part has range-within-a-range problems? What is the point of "identical or different" thicknesses? Isn't every compared thickness either identical or different?

All claims are examined as best understood.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 126 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under

Art Unit: 3634

35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

As noted above, ALL CLAIMS ARE EXAMINED AS BEST UNDERSTOOD.

Claim 102 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farner (6131700) in view of Bruno (4852691). Farner discloses a light scaffolding plate 100, to be laid, inserted, fitted, riveted, screw, glued, welded, or attached in another way in a metal, preferably aluminum frame of a facade or rolling scaffold provided for this purpose or to be suspended directly in a scaffold, in various lengths and widths as a sandwich panel having an upper and lower layer and spacers, located between them, made of plastic wherein the upper and lower layers comprise sinkhole perforated sheet metal and are molded, fitting with one or more of the known scaffold floor systems or scaffold systems, bonded or embedded in a formfitting way through multiple rivets molded from the plastic of the spacer or its cover layers connected thereto, but fails to disclose how the plate is formed. Bruno teaches the formation of the scaffolding board, as recited in column 3, lines 1-5. The use of light weight is commonly used in the art to provide a scaffold which is lighter in weight and has a greater resistance to the effects of the weather. Therefore, it would have been obvious to one of ordinary skill in the art to

Art Unit: 3634

form the scaffolding plate of Farner as taught by Bruno so as to provide a scaffold which is lighter in weight and has a greater resistance to the effects of the weather.

Claim 103 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farner (6131700) in view of Bruno (4852691). Bruno further discloses the light scaffolding plate 21, made of the material composite according to claim 102, fiber-reinforced plastic composite, wherein it has border or edge terminuses, molded-on lateral parts, intermediate webs, frame reinforcements, shelving and suspension fittings on the entire or interlocking parts of the width or length, also in known claw, hook, or rounded groove form to be hung in an angled profile, U-profile, or tubular profile, which are molded directly on or from, and also only or additionally has holes to be hung in the scaffold structure, which is provided with corresponding upright pins, the holes being reinforced by hollow rivets made of metal or plastic or by material compression at the hole edges, recited in column 3, lines 36-41.

Claim 104 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farner (6131700) in view of Bruno (4852691). Farner discloses the light scaffolding plate according to claim 102, wherein it is suitable for a falling weight test, with or without reinforcement, frameless, self-supporting, supporting a full load, and using 100,150,200, or 250 kg falling weight in the middle or another location between the suspensions of the plate and is stackable with or without a molded lateral protection part of 10, 15, or even, as a falling guard, of over 100 cm height.

It has been held that the recitation that an element is "suitable for" performing a function is not a positive limitation but only requires the ability to so perform. It does not

constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138./

Capable of

Claim 105 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farner (6131700) in view of Bruno (4852691). Farner discloses the light scaffolding plate according to claim 102, wherein the lateral protection parts have identical or different thicknesses or recesses and/or openings, are transparent to light, are extended by independent second and/or third parts in height through placement, insertion, or other attachment and are fixed in such a way that they are removable and secured against unintentional detachment, as best seen in Figure 4.

Claim 106 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farner (6131700) in view of Bruno (4852691). Farner discloses the light scaffolding plate according to claim 102, wherein the support core between the two cover layers of the plate is made of molded thermoplastic or duroplastic material, such as honeycombs, webs, caps, corrugated profiles, foamed or other spacer shapes, particularly having closed pores, with or without fiber, textile, or nonwoven material reinforcement or solid external and/or intermediate webs.

Claim 107 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farner (6131700) in view of Bruno (4852691). Farner discloses the light scaffolding plate according to claim 102, wherein one or both cover layers, the boundary terminuses, and/or molded-on lateral parts, suspension and paneling fittings and/or the support core are exclusively made of multilayered thermoplastic material, prepared with highly-oriented reinforcement elements having bidirectional molecular alignment, of identical or

Art Unit: 3634

similarly high rigidity in strength and do not contain glass fibers or other reinforcements made of non-thermo plastic material and are thus completely recyclable, as best seen in Figure 3.

Claim 108 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farner (6131700) in view of Bruno (4852691). Farner discloses the light scaffolding plate according to claim 102, wherein the thermoplastic support core and/or the cover layers or the material penetrating the perforated sheet on one or both sides are made of Plexiglas (PMMA), thermoplastic polyester (PET/G), polyamide (PA), polycarbonate (PC), polyethylene (PE), polytetrafluoroethylene (PTFE), polypropylene (PP), polyoxymethylene (POM), polyvinyl chloride (PVC) or a mixture of these substances having identical or different melting points or of a duroplastic or duromeric material such as phenol resin, cresol resin (PF), urea resin (UF), melamine resin (MF), and polyester resin (UP) or a mixture of these substances, as recited in column 2, lines 20-29.

Claim 109 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farner (6131700) in view of Bruno (4852691). Bruno further discloses the light scaffolding plate according to claim 102, wherein, to achieve better strength and rigidity, modulus of elasticity, modulus of bending and creep, hardness, dimensional stability in the heat, tearing and tensile strength, compression resistance, dimensional stability, density, fatigue strength, thermal conductivity, melting viscosity, reduction of stretching, impact toughness, impact strength when notched, creep tendency, shrinkage, thermal expansion, abrasion resistance, UV and weather resistance, and melt flow index, additives which influence these are admixed with the thermoplastic material or parts

Art Unit: 3634

thereof, such as talcum, wood flour, wollastonite, zinc oxide, metal powder, mica, calcium carbonate, or other suitable substances, or the materials themselves already have different melting points, as recited in column 2, lines 17-25.

Claim 110 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farner (6131700) in view of Bruno (4852691). Bruno further discloses the light scaffolding plate according to claim 102, wherein it has a width of 58 to 65, 88 to 95, 118 to 125, or up to 150 cm, calculated with or without the lateral upward bevel, and a length of up to approximately 60, 100, 150, 200, 250, 300, 350, or 400 cm and may be attached sufficiently securely and removably to the scaffolding using securing pins or other securing devices, as recited in column 3, lines 41-45.

Claim 111 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farner (6131700) in view of Bruno (4852691). Farner discloses the light scaffolding plate according to claim 102, wherein the lateral downward bevel in the region of the suspension at both ends of the plate is used as a displacement guard against the suspension and the suspension is secured on one or both ends of the plate using a permanently elastic plastic spring or flap which only opens to pressure, the plate has a slip-proof, raised, or depressed texture over the entire top of the cover layer or at individual points thereof, the perforated metal sheet on top and below in connection with the support core makes 70, 60, or 50% in the actual perforation makes up approximately 50, 40, or 30% with a sinking to 1 to 3 mm and thus absorbs the static strain towards sag at the required load, as recited in column 4, line 21-24, and as best seen in Figure 6.

Claim 112 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farner (6131700) in view of Bruno (4852691). Farner discloses the light scaffolding plate according to claim 102, wherein the perforated metal is either aluminum, also admixed with other metals, steel (hot galvanized or aluminized), stainless sheet steel, or other metals or metal composite materials and has either a simple perforation, a sinkhole, slotted bridge, projecting, lapped, or similar perforation or a depressed perforation in this or similar form and is provided with stabilizing beads, which are oriented to the cover layer, in the longitudinal for transverse direction of the plate and is provided with an additional primer (adhesion promoter) or a color layer toward the top or bottom, as recited in column 4, lines 41-47.

Claim 113 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farner (6131700) in view of Bruno (4852691). Farner discloses the light scaffolding plate according to claim 102, wherein the external perforated sheet cover layer has unperforated metal strips between the rows of holes in the perforation, particularly in the longitudinal or similar perforation, in the direction of the main load towards sag and, in the event of sinkhole, slotted bridge, or similar perforations in the perforated sheet, which are positioned on one or both sides of the plate, preferably linearly parallel to the main sag direction upon load of the plate, and may even be offset to one another, the plastic material which penetrates the sheet at the hole locations has multiple connections, equal to the multiple holes, which are formfitting, similar to rivets or flat rivets, between the perforated sheet and support core, so that a homogeneous

Art Unit: 3634

connection arises which is distributed over the entire plate area, as best seen in Figure 8.

Claim 114 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farner (6131700) in view of Bruno (4852691). Farner discloses the light scaffolding plate according to claim 102, wherein the perforated sheet cover layer is provided over the entire area on one side only on top and is provided with lateral C-shaped, L-shaped, or U-shaped stiffening downward bevels, which completely or partially enclose the support core on the other side, as best seen in Figure 8.

Claim 115 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farner (6131700) in view of Bruno (4852691). Bruno further discloses the light scaffolding plate according to claim 102, wherein it or the lateral projection parts which are molded or placed on has an identification or inscription, also as an advertising text, which is visible over the entire area and/or only through the holes of the perforated sheet cover layer, is colored permanently, weather resistant, and UV resistant in the plastic material in one or more colors by choice and/or in the metal cover layer, or is provided with a primer/adhesion promoter, as column 3, lines 1-5.

Claim 116 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farner (6131700) in view of Bruno (4852691) in further view of Apostolopoulos (20020092706). Farner in view of Bruno as advanced above fails to disclose a climb through opening. Apostolopoulos teaches the utility of a scaffolding with a climb through opening 450, having an inserted flap made of identical material, which is connected to the plate either using typical hinges or preferably using a flexible cover and hinge layer made of

Art Unit: 3634

permanently movable, thermoplastic material, and permanently actively closes the climb-through opening automatically or by actuating the closure after climbing through, the frame for hanging the flap of the climb-through opening containing reinforcements and the flap being made of the same material as the plate, either in the same or much lower thickness. The use of climb through openings are commonly used in the art to allow the user to have easy access to a higher scaffolding member. Therefore, it would have been obvious to one of ordinary skill in the art to provide the scaffolding apparatus of Farner in view of Bruno with a climb through opening as taught by Apostolopoulos so as to allow the user easy access to a higher scaffolding member.

Claim 117 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farner (6131700) in view of Bruno (4852691). Bruno discloses the light scaffolding plate according to claim 102, wherein, through a deformation of the cover layers, these become supporting webs or profiles within or at the edges of the support core or are used themselves as the support core, and within the plate or as a lateral terminus of the plate in the longitudinal direction, one or more pipes or U-profiles made of metal or fiberglass-reinforced plastic, also enclosed or molded out of perforated sheet metal, are welded in or on or glued in or on to absorb elevated loads or only as a boundary terminus, as recited in column 3, lines 1-5.

Claim 118 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farner (6131700) in view of Bruno (4852691). Bruno discloses the light scaffolding plate according to claim 102, wherein the scaffolding plate cover continues with identical surface in one piece without interruption up to the end of the web of the claw or round

Art Unit: 3634

groove of the suspension fitting or the two suspension fittings, the metallic scaffolding plate cover layers embedded in the plastic cover layer at its edges as a protection from injuries and the web of the claw of the suspension part is positioned perpendicularly to the scaffolding plate or is positioned angled up to 45 degrees to the scaffolding plate or with a slight angle inward and the opening of the claw of the suspension part, up to its throat, has a depth of 10 and at most 20 mm, of 20 and at most 30 mm, of 30 and at most 48 mm, or a larger dimension, as best seen in Figures 12 and 14.

Claim 119 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farner (6131700) in view of Bruno (4852691). Farner discloses the light scaffolding plate according to claim 102, wherein the rounded area of the suspension groove is crescent-shaped or only partially crescent-shaped, the web of the claw of the suspension part simultaneously supports the holding of the plate on the rising web of the holder profile through appropriate deformation, and a component of the suspension part of the plate, both for the claw and for the suspension round groove, is a holding guard engaging on the holding profile or suspension pipe, as best seen in Figures 6 and 7.

Claim 120 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farner (6131700) in view of Bruno (4852691). Bruno further discloses the light scaffolding plate according to claim 102, wherein a perforated metal plate is embedded or welded bodily enclosed permanently in a thermoplastic layer, plate, or film made of one or more layers, in the perforated metal plate, all or only some holes of the plate have hole edge depressions, the perforated metal cover layer has a constriction of the hole tapering conically inward on all or only individual hole edges, and all or individual holes of the

Art Unit: 3634

perforated metal cover layer simultaneously have edge depressions and the material of the cover layer narrows in thickness toward the hole center on all or individual hole edges, as recited in column 3, lines 1-5.

Claim 121 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farner (6131700) in view of Bruno (4852691). Bruno further discloses the light scaffolding plate according to claim 102, wherein the edge depressions of the perforated metal cover layer have the height, more than the height, or less than the height corresponding to the material thickness thereof, the edge of the holes in the perforated metal cover layer runs from top to bottom at an angle of 25 to 65 degrees toward the hole center and is or is not flattened shortly before the opening of the hole, and the height of the downward bevel may exceed the plate thickness by up to multiple times, as best seen in Figure 4.

Claim 122 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farner (6131700) in view of Bruno (4852691). Bruno further discloses the light scaffolding plate according to claim 102, wherein, from the viewpoint of the plate center, a groove is molded onto the entire plate width in front of the outer downward bevel(s), from the viewpoint of the plate center, a semicircular or partially semicircular recess is provided in front of the outer downward bevel(s) on both sides on thinner plates and continuously on thicker plates, and it is provided in the main support direction with grooves, beads, and/or upward and downward bevels and, within the plate area, it has small or large recesses, with or without plates or inserted covers of the same or lesser thickness, also

Art Unit: 3634

bonded to the plate using elastic thermoplastic material, as best seen in Figure 4, as recited in column 3, lines 1-5.

Claim 123 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farner (6131700) in view of Bruno (4852691). Bruno discloses the light scaffolding plate according to claim 102, wherein both the thermoplastic support core in direct connection and also the cover layers as intermediate layers of the welded connection to the perforated metal are manufactured from polypropylene (PP) and the plate is therefore completely recyclable in spite of the different melting points of plastic and metal, as best seen in Figures 7-9, and as recited in column 3, lines 1-5.

Claim 124 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farner (6131700) in view of Bruno (4852691). Bruno further discloses the light scaffolding plate according to claim 102, wherein all or individual holes of the perforated or sinkhole perforated sheet metal plate are implemented as round or square holes, oblong holes, hexagonal or polygonal holes, diamond holes, triangular holes, star-shaped holes, keyholes having rounded corners or angled, or even as other types of holes and the plate has an area weight of up to 11, 9, or 7 kg/m² at a thickness of approximately 50 to 60 mm, an area weight of up to 10, 8, or 6 kg/m² at a thickness of approximately 40 to 50 mm, an area weight of up to 7, 6, or 5 kg/m² at a thickness of approximately 20 to 30 mm, and an area weight of up to 6, 5, 4, 3.5, or 3 kg/m² at a thickness of up to 20 mm, as recited in column 3, lines 41-45.

Claim 125 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farner (6131700) in view of Bruno (4852691). Bruno further discloses the light scaffolding

Art Unit: 3634

plate according to claim 102, wherein the perforated metal or sinkhole perforated sheet metal cover layers in an aluminum alloy, which are bonded to plastic, each weigh approximately 0.6 kg to 1.8 kg and are 0.3 to 0.5 mm thick, the thermoplastic support core, with or without reinforcement, weighs 0.6 to 1.0 kg/m² per centimeter of thickness, and the finished compressed plate having aluminum cover layer is chemically treated or anodized in a selected color in the anodizing bath in the cover layers together with the visible plastic parts, as recited in column 3, lines 41-45 and column 4, lines 1 and 2.

Claim 126 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farner (6131700) in view of Bruno (4852691). Bruno further discloses a light plate analogous to a scaffolding plate according to claim 102, wherein it is used as a floor plate, timbering plate, wall plate, wall panel, sound protection plate, thermal or sound insulation plate, roof panel, support layer for a photovoltaic laminate or for photovoltaic cells, table or table tennis plate, bench or chair, also having molded-on and foldable legs, door, gate, or garage door, stair step, as a decorative plate and for vehicle superstructures, as well as many other products, and molded as a supporting profile and it is used as a vacuum 8, panel if a gas-permeable support core and a gas-impermeable film which encloses it are provided, as best seen in Figures 11 and 12.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CANDACE L. BRADFORD whose telephone number is (571)272-8967. The examiner can normally be reached on 9am until 5pm.

Art Unit: 3634

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katherine Mitchell can be reached on (571) 272-7069. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Katherine W Mitchell/
Supervisory Patent Examiner, Art
Unit 3634

/Candace L. Bradford/
Patent Examiner
Art Unit 3634
June 30, 2010